Building a Safety Culture

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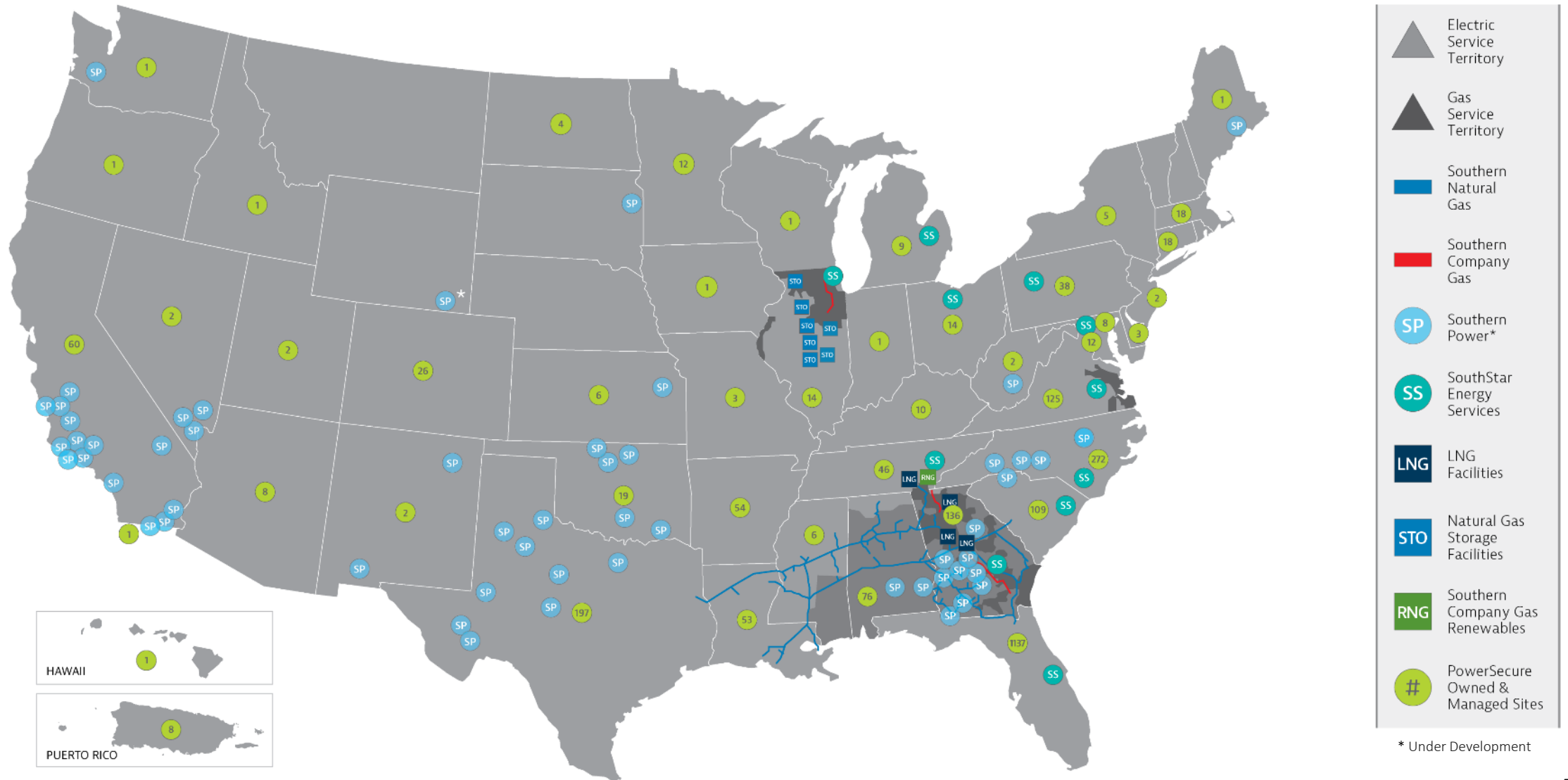
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Virginia Natural Gas

Company Overview

Who is Southern Company?

America's premier energy company – providing clean, safe, reliable and affordable energy, and customized solutions

February 2025

Southern Company Subsidiaries

Alabama Power	1.5 million electric utility customers	
Georgia Power	2.8 million electric utility customers	**7**
Mississippi Power	192,000 electric utility customers	Electric & Natural Gas Utilities
Southern Company Gas	4.4 million natural gas distribution customers in 4 states	
	Nicor Gas — 2.3 million natural gas distribution customers in Illinois	**9 Million**
	Atlanta Gas Light — 1.7 million natural gas distribution customers in Georgia	Customers
	Virginia Natural Gas — 312,000 natural gas distribution customers in Virginia	More than **28,000**
	Chattanooga Gas — 71,000 natural gas distribution customers in Tennessee	Employees
Southern Power	13,000 MW of wholesale solar, wind, natural gas and clean alternative technologies in 15 states	Approximately **45,000 MW** of Generating Capacity
PowerSecure	A national leader in distributed infrastructure technologies doing business nationwide	
Southern Nuclear	An innovative leader among the nation's nuclear energy industry	
Southern Linc	Wireless communications service	

Southern Company Gas

Southern Company Gas

Atlanta-based natural gas services company and subsidiary of Southern Company.

⭐ **Corporate Headquarters**

💧 **GAS Distribution Operations**
- Atlanta Gas Light
- Chattanooga Gas
- Nicor Gas
- Virginia Natural Gas

🟧 **GAS Marketing Services**

▬ **Pipeline Investments**

🌿 **Renewable Natural Gas**

⬛ **LNG Storage**

2024 Stats

4.4 Million
utility customers

668,000
retail customers

78,500 Miles
of pipe

157 Bcf
storage capacity

4,900
employees

Virginia Natural Gas

Company Details

- 400 employees
- 42K miles of natural gas distribution pipeline
- 310K customers in SE Virginia

Company History – 175 Years

- 1850: Company began City Gas Light Company, chartered to provide gas lights to the streets of Norfolk.
- 2000: AGL Resources Inc. bought VNG from Dominion
- 2016: AGL Resources acquired by Southern Company
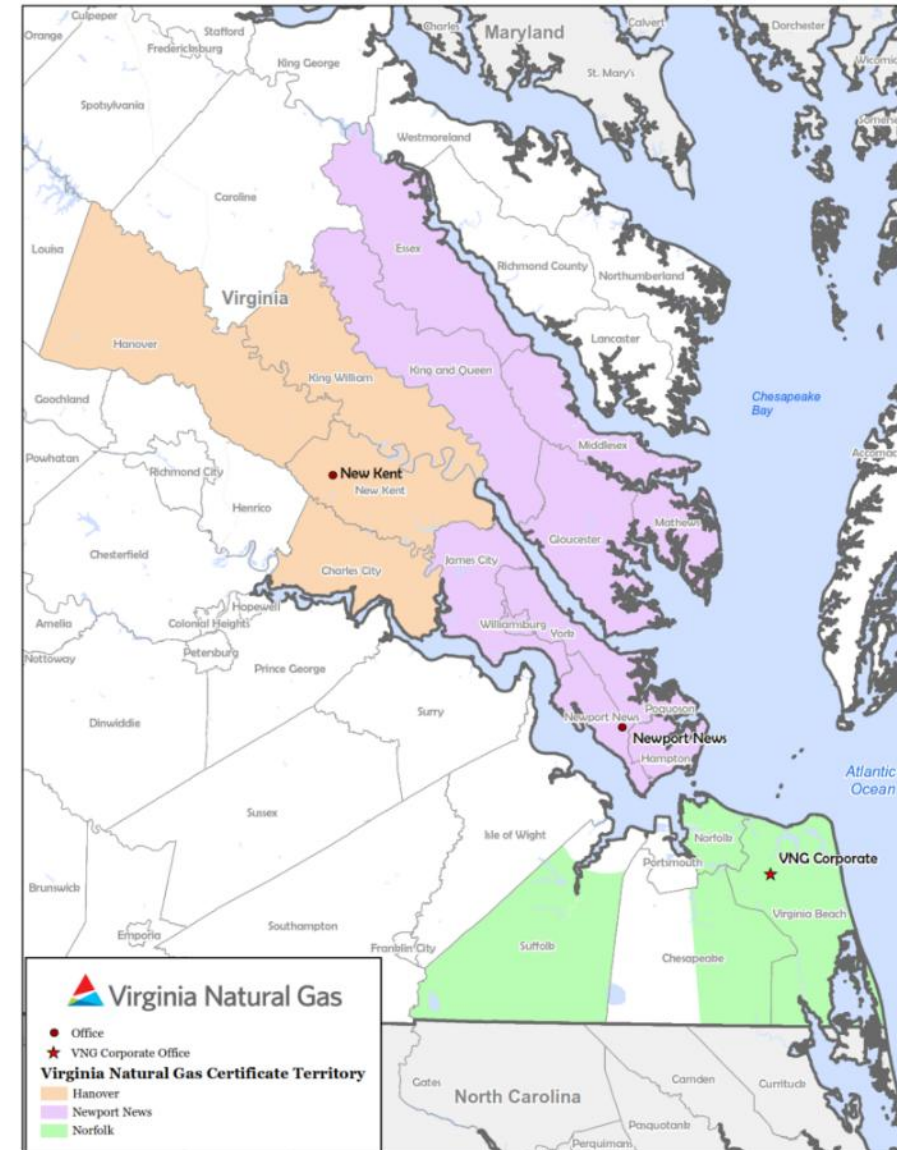
Southern Company's Core Values

Safety First
We actively care about the safety and well-being of our employees, customers and communities. Safely approaching every job, every day, always comes first.

Intentional Inclusion
We are One Team, working to foster a culture of belonging and ensuring our diverse team feels valued. Investing in an equitable culture benefits employees, customers, communities and shareholders.

Act with Integrity
We act with honesty, respect and fairness, demonstrating trustworthiness in all we do. We are true to our word and follow through on our commitments.
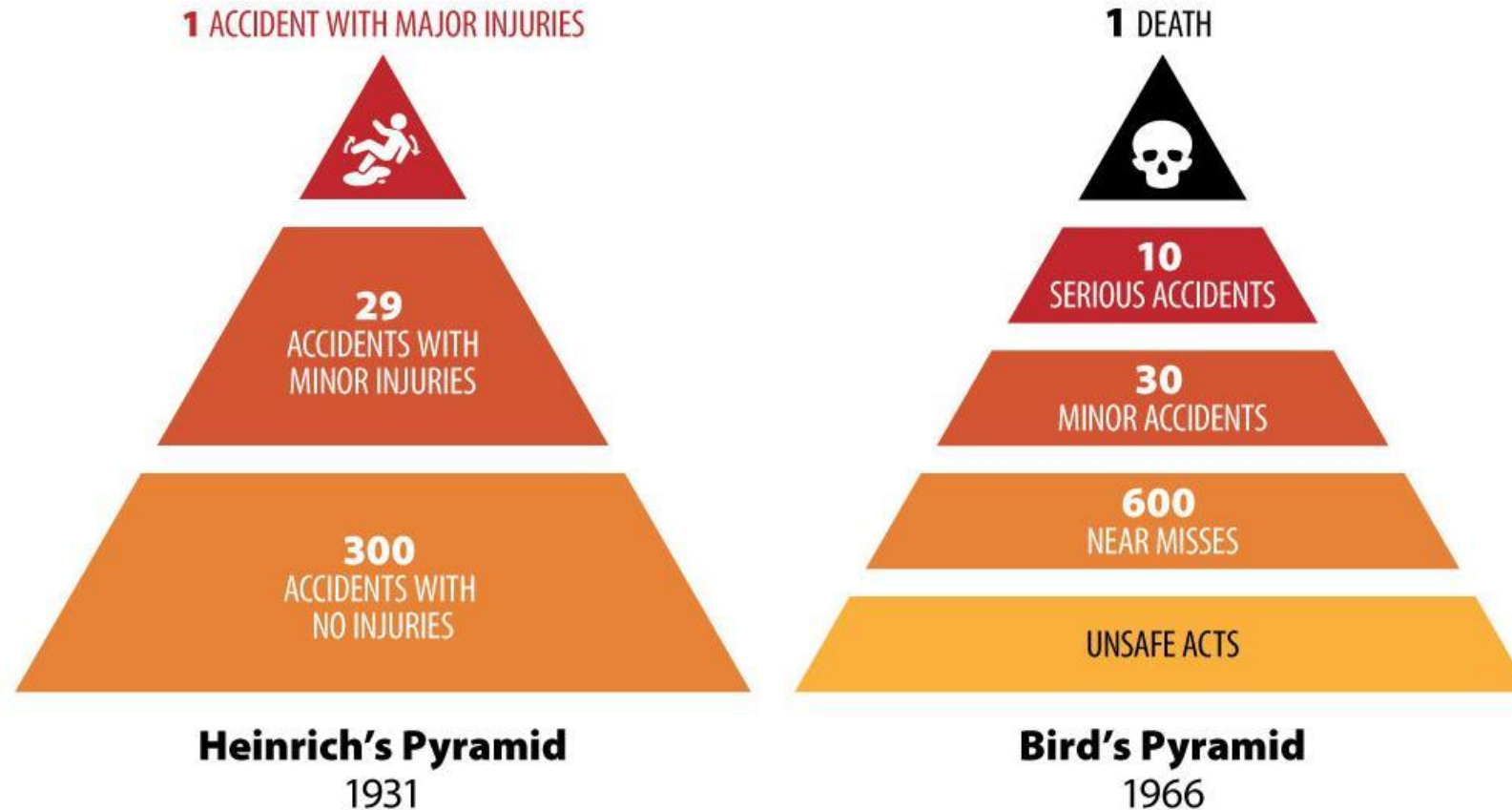

Superior Performance
We keep customers at the center of everything we do, with a focus on continuous improvement. We provide exceptional service, delivering innovative solutions that benefit our customers, communities, investors and the environment

Progression of a Safety Culture

The Safety Pyramid

Heinrich's Pyramid
1931

- 1 ACCIDENT WITH MAJOR INJURIES
- 29 ACCIDENTS WITH MINOR INJURIES
- 300 ACCIDENTS WITH NO INJURIES

Bird's Pyramid
1966

- 1 DEATH
- 10 SERIOUS ACCIDENTS
- 30 MINOR ACCIDENTS
- 600 NEAR MISSES
- UNSAFE ACTS

1930s-1990s: Widespread acceptance of the safety pyramid (behavior-based safety)
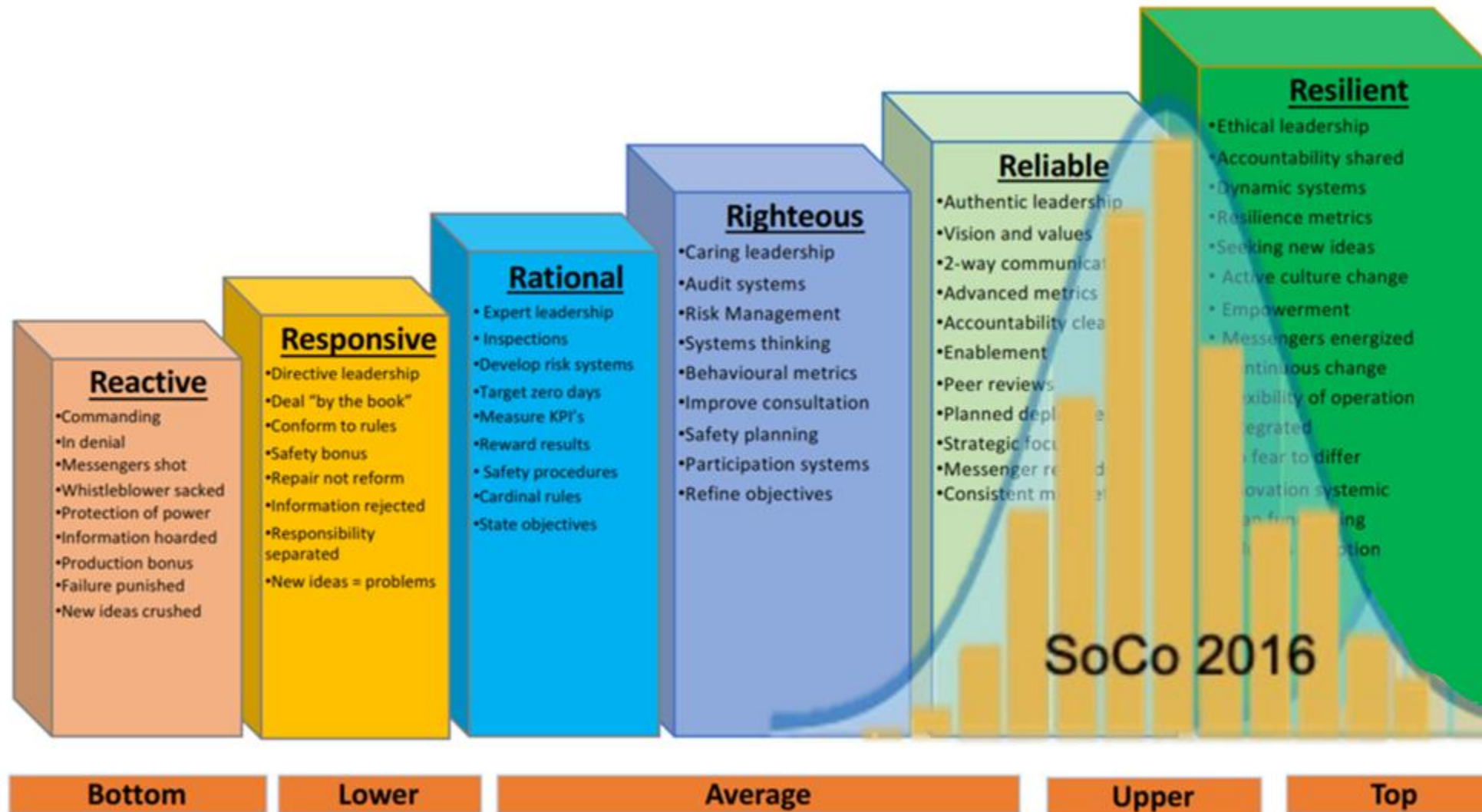 – Focusing on reducing minor incidents & unsafe behaviors naturally lead to fewer SIFs.
2000s: Growing skepticism of the pyramid model; emergency of risk-based approaches

- Goal of zero OSHA recordable injuries

- Widespread adoption across the U.S.

- Employees became hyper-focused on safety

- Utilized reward-based incentives
  - Gifts and meals given to departments who worked injury free
  - Employees' bonus structure aligned with OSHA RI counts

- OSHA's 2012 Memorandum clarified acceptable incentives

- Well-intentioned but had unintended consequences
  - Focused on metrics opposed to meaningful risk reduction
  - Underreporting of injuries
  - Self-appointed pressure to not report minor injuries
  - Safety initiatives to address "low hanging fruit" injuries opposed to preventing high-consequence, low frequency events (SIFs).
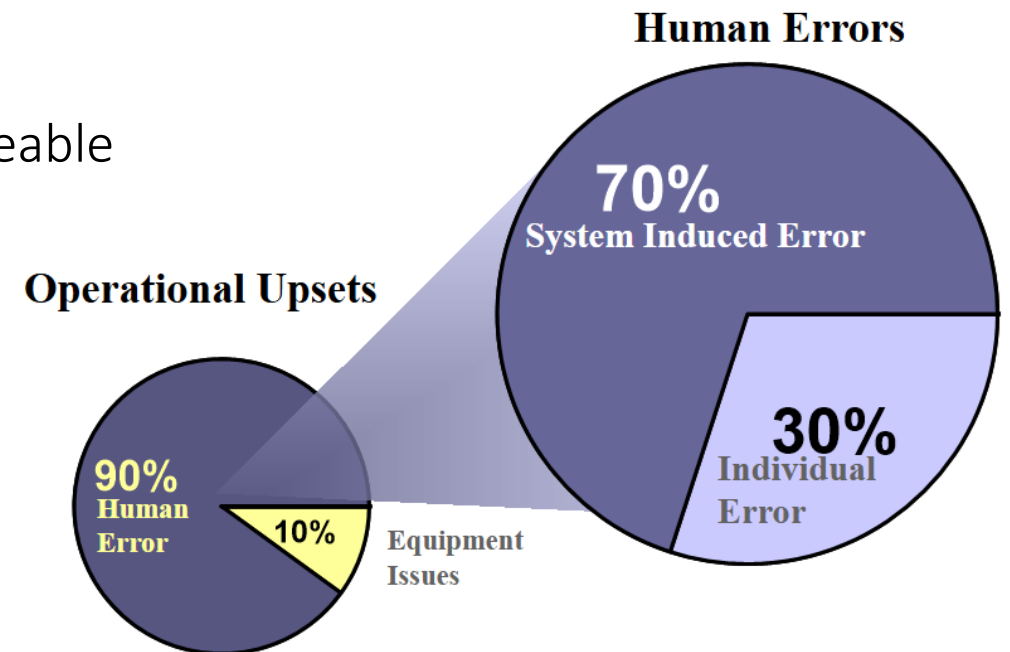
- Transitioned from Target Zero to a proactive safety culture

- Introduced Human Performance principals, especially in "Event Learnings"
  - Since humans are fallible, efforts should be put forth to learn and build system and processes to prevent unwanted events
  - 5 principles
    1. People make mistakes
    2. Systems drive behavior
    3. Mistake-likely situations are predictable and manageable
    4. Learning is vital
    5. Leadership's response to failure matters

Human Errors

70% System Induced Error

30% Individual Error

Operational Upsets

90% Human Error

10% Equipment Issues

Safety Programs Implemented Post-2016/2017 Safety Culture Survey

- Safety and Health Management System – Continuous Improvement
- Critical Risk Management
  - Risk registers
    - Identify all tasks performed and calculate risk ratings both without and with controls
      - Goal – Identify high consequence activities whose current controls do not adequately lower risk
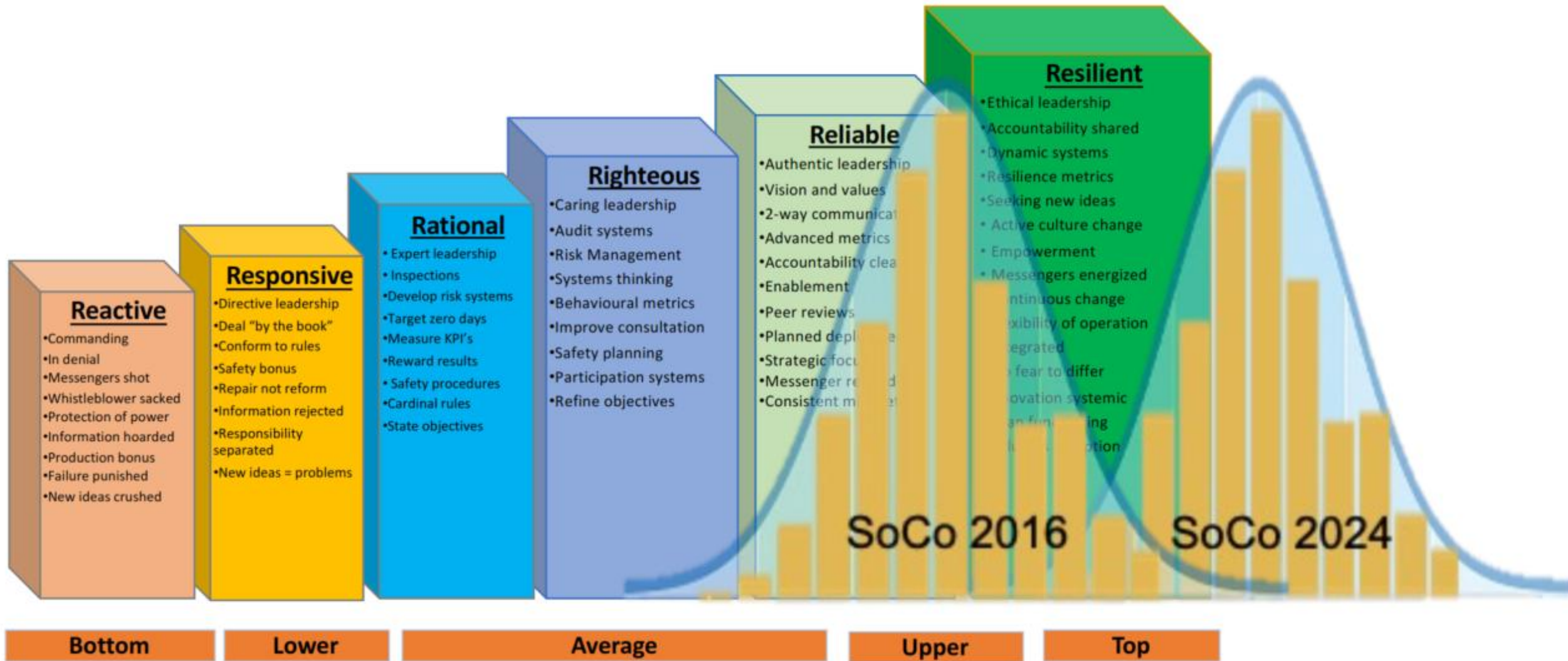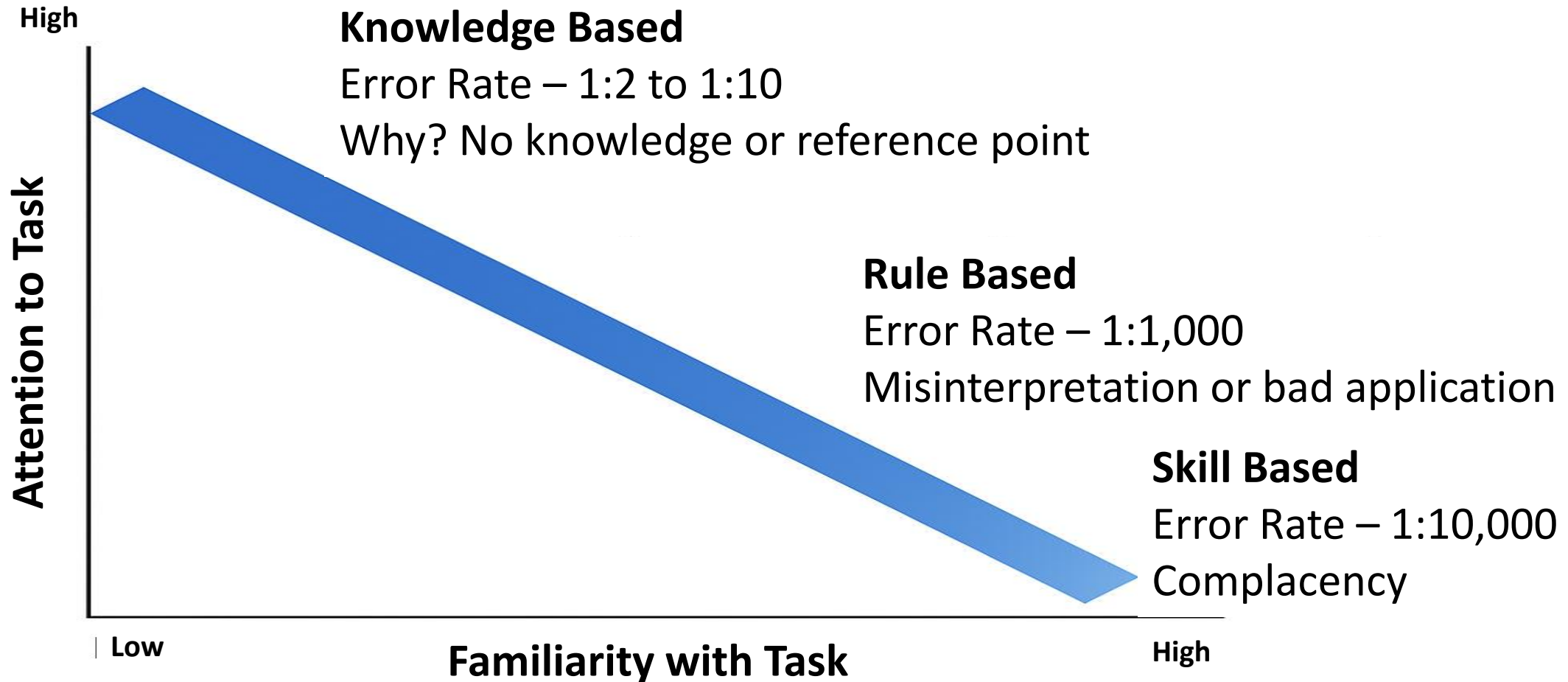
Since 2017, OSHA recordable counts have increased…but is that a bad thing?

VNG Safety Onboarding and Training Programs

Skill-Rule-Knowledge Framework

High

Attention to Task

Knowledge Based
Error Rate – 1:2 to 1:10
Why? No knowledge or reference point

Rule Based
Error Rate – 1:1,000
Misinterpretation or bad application

Skill Based
Error Rate – 1:10,000
Complacency

Low

Familiarity with Task

High

Empowering Local Leadership Through Real-Time Trend Analysis

- Safety creates metric/trend reports, often a month behind.

- Today's technology (Power BI) allows for the sharing of real-time data to Operations leadership
  - Quicker trend identification and implementation of response plans
  - Promotes transparent communications
  - Engages local leadership
  - Increases safety initiative buy-in

New Personnel Onboarding and Orientation

- Structured onboarding process

- Safety expectations from day one

- Communicating workplace safety from the start

- Engage new employees and reinforce company culture and policies
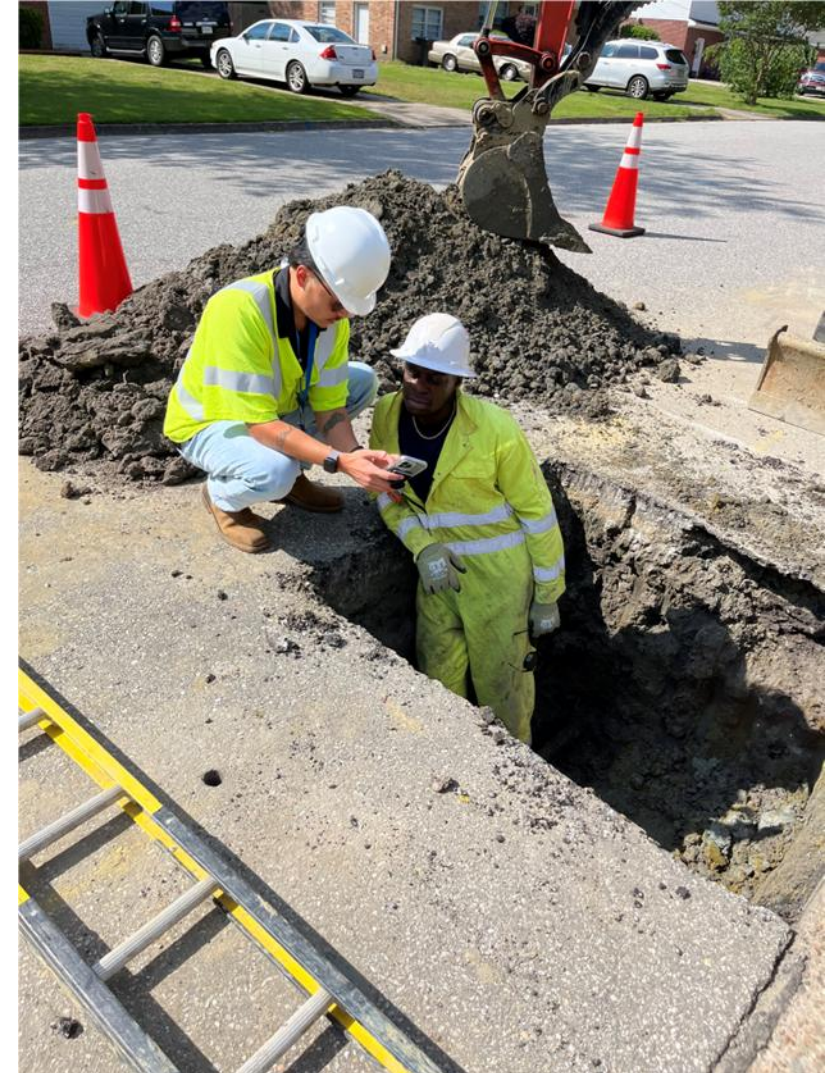
- Proper, timely tool training ensures safety and operational efficiency in the workplace.

- Familiarity with equipment reduces accidents and improves task performance.

- Structured training programs are critical for effective tool and equipment use.

Ownership of Safety Training:
Lead personnel actively take responsibility for safety training and equipment checks.

Mentoring for Safety:
Frontline Leaders mentor team members to ensure safety and best practices.

Reinforcing Accountability:
Crew Leads take ownership of crew safety and maintain high level of apprehension of policy with crews.

Investment in Safety Leaders and Ongoing Initiatives

Safety Leadership Investment

Mentoring of upcoming safety leaders strengthens organizational commitment

Support for Safety Initiatives

Ongoing support for safety programs through employee ownership

Mitigating Driving Safety Risks through Proactive Initiatives

- Operating a motor vehicle is the most hazardous task performed.

- Employees operate vehicle larger than their personal vehicles.

- Vehicle collision incidence rates are inversely related to experience driving the assigned vehicle.

- Steps taken to increase defensive driving acumen:
  - Smith System® training – classroom and on-the-road instruction
  - Controlled environment, hands-on training:
    » Module-based Driver Safety Qualifications (DSQs)
    » "Driving Rodeos"
  - Vehicle telematics with coaching feedback

Mitigating Driving Safety Risks through Proactive Initiatives

Vehicle Telematics

- 15+ years of utilizing DriveCam® by LYTX
- Early identification and addressing of poor driving behavior:
  - Sets vehicle driving expectations,
  - Elevates defensive driving skills, and
  - Has long-lasting, beneficial effects.
- Units are installed in vehicles of employees with less than 2 years of service and in all CDL vehicles.

Hands-on Training in a Controlled Environment

- Driving Rodeos
  - Allows drivers to become familiar with their vehicles in a safe, controlled environment.
    » Practice backing, learning turn radius, etc.
- Driver Safety Qualifications (DSQs)
  - Module-based lessons including but not limited to:
    » Pre-trip inspection / Circle of Safety
    » How to proper set your mirrors
    » Proper parking spot selection

- An employee distracted due to wellbeing issues cannot fully focus on the task at hand.

- The company has an active investment in employees' and their dependents' wellness.

- Wellness reward programs.

- Monetary Health Savings Account.

Functional Movement Program to Prevent Soft Tissue (MSK) Injuries

- Soft tissue injuries account for 56% of all OSHA recordable injuries.

- What is "Functional Movement"?
  - An injury prevention methodology that:
    - Focuses on how the body moves during work tasks, and
    - Corrects non-ideal movement patterns that may lead to MSK injuries

- VNG partners with a functional movement vendor that provides:
  - Real-time ergonomic coaching in the field,
  - Creates employee-specific programs to address at risk body parts,
  - Utilizes wearable sensor and machine vision technology to illustrate ergonomic risks before and after being coaching.

- Increasing functional movement knowledge:
  - Decreases the chance of MSK injury
  - Extends employees' field working career by delaying potentially career-limiting injuries

Strategic Partnerships with Pipeline Safety, QA, & Risk Management

Collaboration with Pipeline Safety (APEX)
 Enhances strategic initiatives and drives operational standards

Engaging Quality Assurance:
Teams improves procedural standards and overlapping safety compliance

Partnering with Risk Management
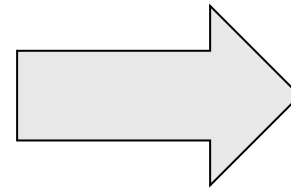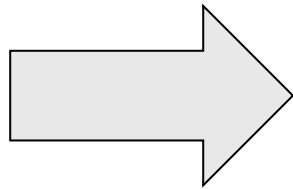Strengthens safety measures and allows for proactive response by Safety, QA, and APEX.

Innovations and the Future of Safety

Evaluation of newer FR fabric technology

- Flash suits for escaping gas events
  - Thinner, more breathable materials offering similar protection
  - Collaborating with Dupont

Preventing Heat Exhaustion

- Rehab trailers offer on-site medical support and rest areas, enhancing emergency response and worker rehabilitation during longer projects.

- Heat illness Awareness/ Education

- New materials and technologies

- Enhanced Comfort

- Focus on ergonomic fit and breathable

- Versatile Applications

- Upgraded equipment for specific job requirements

Emergency Response

Escaping Gas Simulations

Simulation Exercises

Conduct exercises that replicate actual gas leak situations to prepare personnel for safe and efficient responses.

Training in Safety Procedures

Educate critical risk safety awareness and hazard recognition during gas leak events and outages.

Enhancing Emergency Response

Enhance teamwork and critical decision-making skills in gas leak emergencies .

Fundamental Preparedness Principles

Utilizing ICS and coordinating efforts with municipal partners to manage emergencies successfully

Communication and Coordination

Enhance communication security during emergency incidents through various technologies.

Safety and Risk Management

Assess and mitigate risk during low frequency and high-risk incidents.
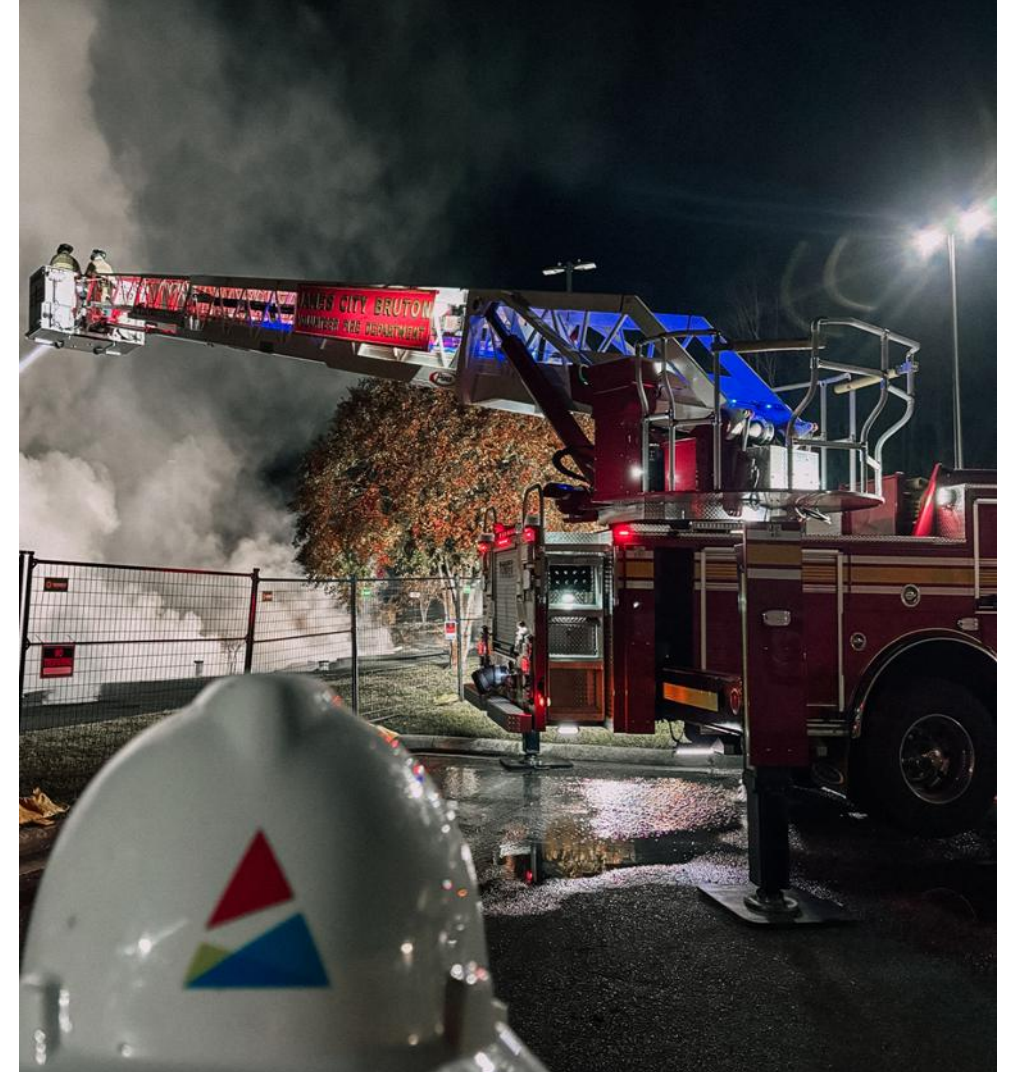
Final Thoughts

Final Thoughts

- Safety is a journey, not a destination.
  - Continuous Improvement
  - Developing a strong safety culture is key
  - Zero incidents does not mean zero risk

- Top-down support is vital, but safety culture doesn't mature until all parties buy in.
  - Human Performance methodologies allow for dialogue where all parties feel empowered to speak up.

> *"We are not defined by the incidents that occur, but by how we respond—with care, accountability, and a commitment to learning."*